

INNOVATION IN NORTH CAROLINA'S COMMUNITY COLLEGES

**Dr. R. Scott Ralls, President
NC Community College System**

- **TECHNOLOGY INNOVATION**
- **ACADEMIC SUCCESS INNOVATION**
- **ECONOMIC AND FINANCIAL INNOVATION**

DISRUPTIVE INNOVATION

“...a process by which a product or service takes root initially in simple applications at the bottom of a market and then relentlessly moves up market, eventually displacing established competitors.”



CLAYTON CHRISTENSEN

Kim B. Clark Professor of Business

Administration at the Harvard Business School

Copyrighted Material
UPDATED AND EXPANDED NEW EDITION

Disrupting Class

*How Disruptive Innovation Will
Change the Way the World Learns*

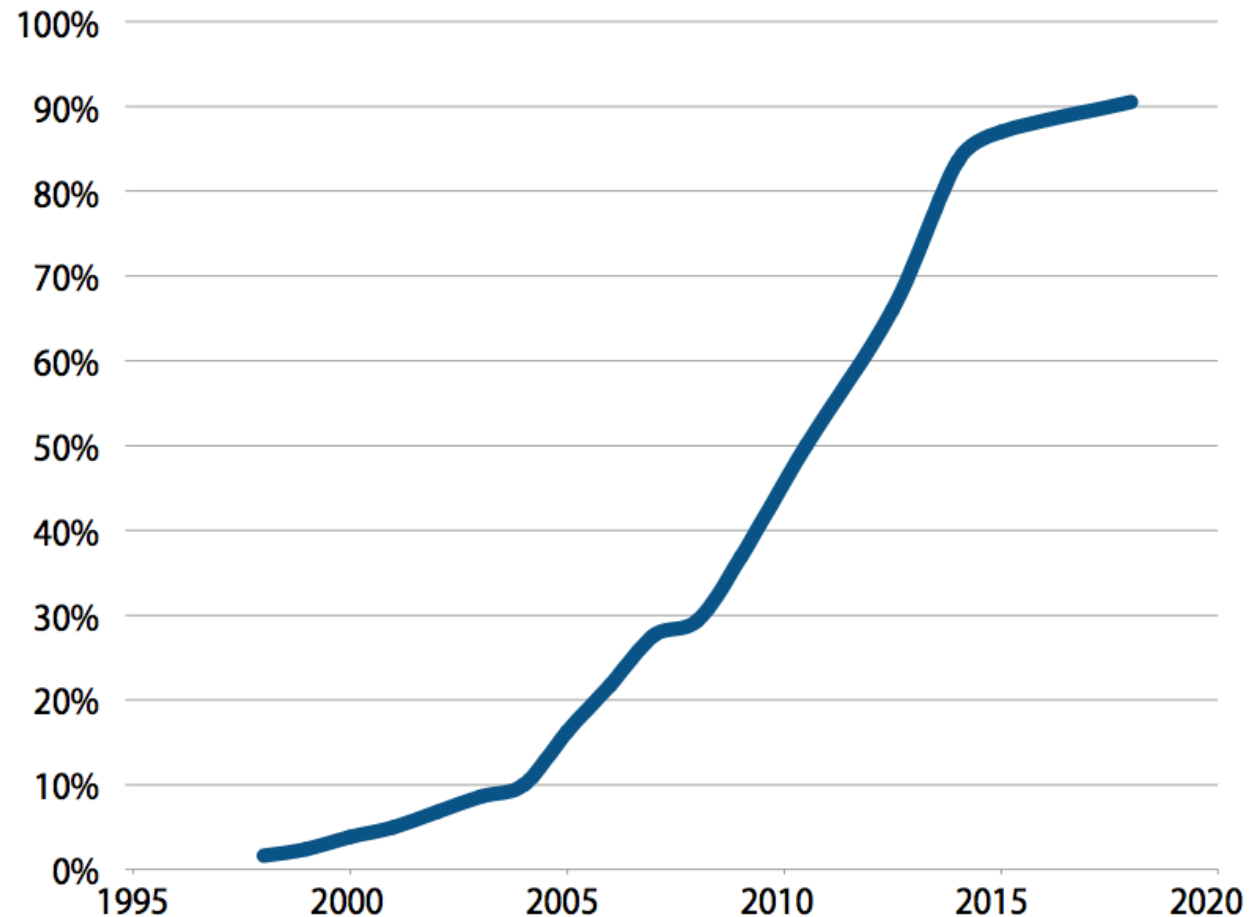


Clayton M. Christensen

BESTSELLING AUTHOR OF *THE INNOVATOR'S DILEMMA*

Michael B. Horn & Curtis W. Johnson

The growth of online courses as percentage of all courses in the North Carolina community college system



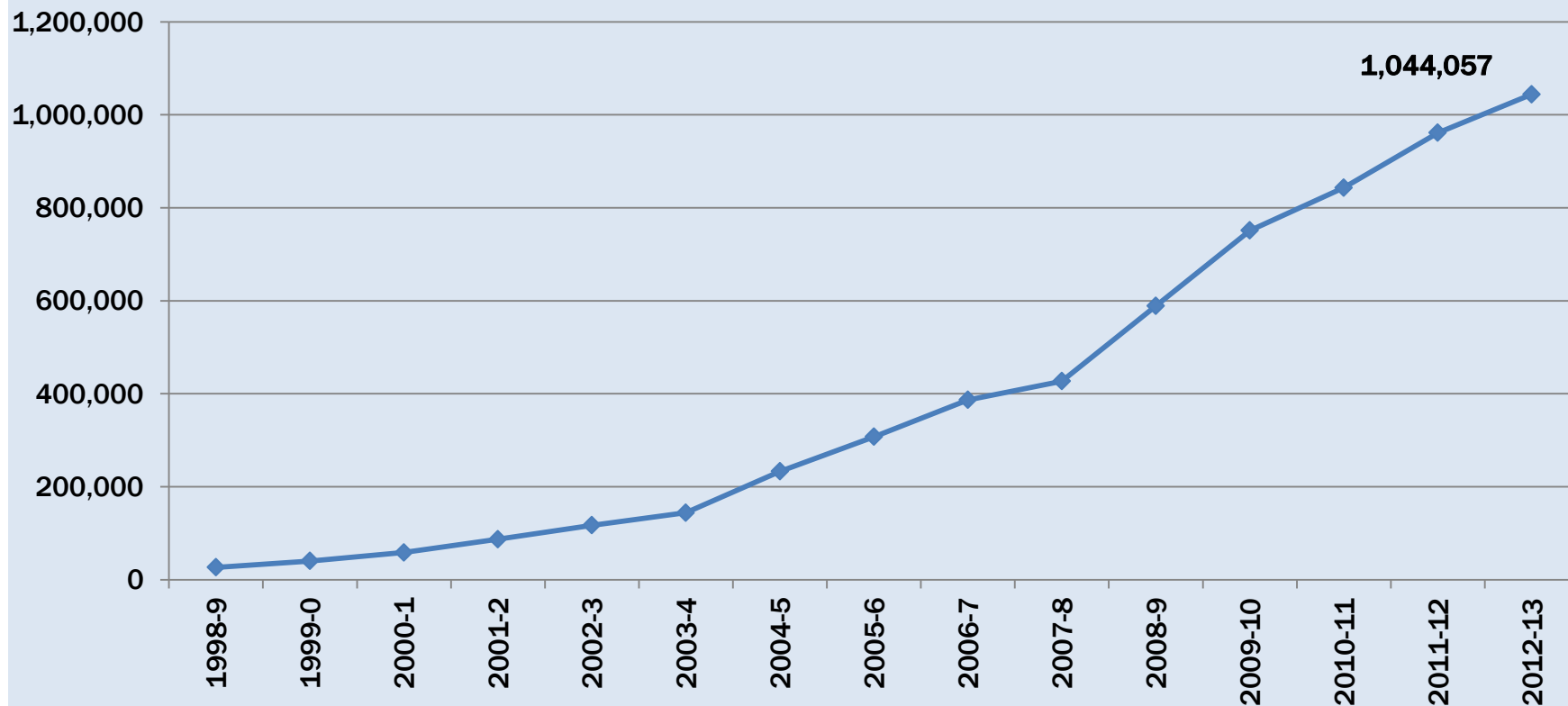
Source: *Disrupting College: How Disruptive Innovation Can Deliver Quality and Affordability to Postsecondary Education*, Christensen et. Al, 2011

DISTANCE LEARNING

- More than **1 million** distance learning course enrollments in NCCCS in 2012-13
- **55%** of all course delivery is via distance learning
- Of the **1 million+** distance courses:
 - **46%** are fully online
 - **16%** are hybrid (>half content online)

DISTANCE LEARNING GROWTH

All DL Methods - Curriculum Enrollments 1998-2013



NCLOR

- Digital repository that provides one platform to organize and store North Carolina's teaching and learning, research, and media content
- Directly integrated with LMSs and DPI's HomeBase
- April 1, 2014, 5-year anniversary of go-live date
- Over 45,000 resources in a wide range of disciplines
- STEM related content:
 - Makes up appx. 75% of LOR content
 - Most requested content by Faculty

NCLOR

http://explorethelor.org

North Carolina Learning Object Repository News & Information Portal

HOME LOG IN GETTING STARTED COLLECTIONS INTEGRATIONS FORMS TRAINING ABOUT THE NCLOR

LOG INTO THE NCLOR

- > Log in with Account
- > Log in as Guest
 - > Request Account
 - > Lost password?

POST SUBJECTS

[Algebra](#) [American Government](#) [Anatomy](#)
[Anthropology](#) [Archaeology](#) [Art](#) [Astronomy](#)
[Biochemistry](#) [Biology](#) [Business](#) [Calculus](#)
[Chemistry](#) [Computers](#) [Developmental](#)
[Math](#) [Economics](#) [Education](#) [Education](#)
[Technology](#) [Engineering](#) [English](#)
[Environmental Science](#) [Genetics](#)
[Geology](#) [Geometry](#) [Health](#) [History](#)
[Humanities](#) [Language Arts](#) [Literature](#) [Math](#)
[Military History](#) [MUSIC](#) [North Carolina History](#)
[Oceanography](#) [Philosophy](#) [Physics](#)
[Physiology](#) [Political Science](#) [Probability](#)
[Psychology](#) [Religion](#) [Science](#)
[Sociology](#) [Spanish](#) [Statistics](#) [Trigonometry](#)
[US Civil War](#) [US History](#) [US Revolutionary War](#)

Medical Billing and Coding Resources Added to NCLOR

FEB 3 Posted by [jsweetin](#)


☆☆☆☆☆ Rate This

On February 1st 2014, 66 new learning resources from medicalbillingandcoding.com (MB&CC) were added to the open educational resources collection. This series explains the basic vocabulary, concepts, and principles that guide the billing and coding professions. Whether it's the organization of a certain code manual or the regulations that govern the creation of a medical claim. MB&CC is an independent research project and not-for-profit. The content is broken into six sections which are; 1. What is Medical Billing & Coding, 2. Medical Coding Training, 3. Medical Billing Training, 4. MBAC at Work, 5. Certification Prep, and 6. Advice.

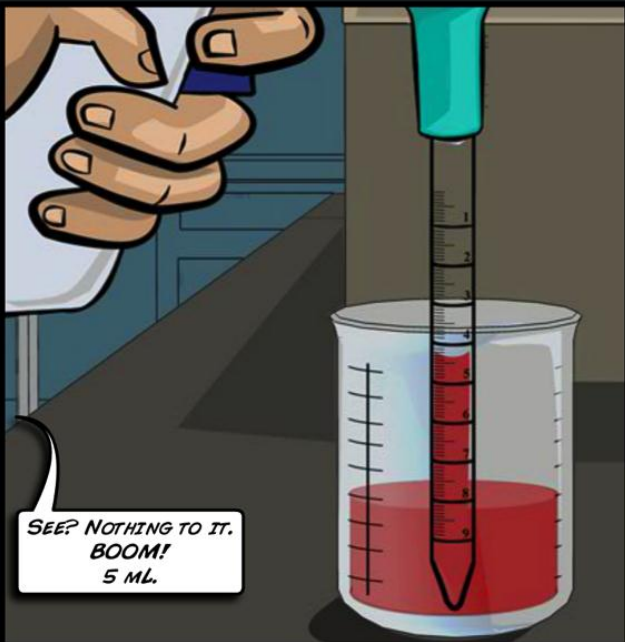
JOLEEN PEREIRA
Certified Professional Coder

Section 2.01: Learn More About Medical C...
 Section 2.02: Medical Coding Vocabulary...
 Section 2.03: ICD-9 & ICD-9-CM Codes


Learning Object Example from BioNetwork



PIPETTING



SEE? NOTHING TO IT.
BOOM!
5 ML.




DRAG ONE TO THE BUBBLE ABOVE:

**A. YOUR SECRET IS SAFE WITH ME.
KEEP UP THE GOOD WORK.**

**B. WAIT A SECOND. ARE YOU
MEASURING BY THE MENISCUS?**

RESOURCES



COMPLIANCE

Choose a response. Then, click NEXT.

ACADEMIC SUCCESS INNOVATION

SuccessNC listed among 2012 Brookings-Rockefeller State and City Government Solutions to Watch

“By fostering greater collaboration among the state’s community colleges and developing rigorous performance measures to assess and improve college offerings, SuccessNC is working to leverage the collective power of North Carolina’s community colleges to improve student outcomes across the state.”



Dr. Ralls testifies before Senate HELP Committee, Attaining a Quality Degree: Innovations to Improve Student Success

Student Success Framework



SuccessNC

Improving Access

Enhancing Quality

Increasing Success

CONNECTION

Basic Skills Plus

Career & College Promise

Common Core Alignment

Career & Technical Education High School to College Articulation

ENTRY

Developmental Education Initiative

Financial Aid Simplification

Math Pathways CIP (Curriculum Improvement Project)

PROGRESS

Minority Male Mentoring

Code Green Super CIP (Curriculum Improvement Project)

Integrated Teaching & Learning Gateway

Comprehensive Articulation Agreement Revision & Reverse Transfer Credit

COMPLETION

Data Initiative



Performance Measures / Funding

Identify & Mitigate Barriers to Student Success

Completion by Design

SuccessNC FRAMEWORK

KEY STATEWIDE INITIATIVES

- **CONNECTION**
 - Basic Skills Plus
 - Career and College Promise
- **ENTRY**
 - Developmental Education Initiative
- **PROGRESS**
 - Code Green Super CIP
 - Comprehensive Articulation Agreement
- **COMPLETION**
 - Completion by Design

College Innovations

- **Central Carolina Works**
 - *Central Carolina CC*
- **MathTank**
 - *Nash CC*
- **MathSense**
 - *Central Piedmont CC*
- **Developmental Math MOOC**
 - *Wake Tech*
- **NAM Certification Integration**
 - *Forsyth Tech*
- **Completion by Design**
 - *Led by Guilford Tech*

Importance of Pathways

“Research suggests that individuals presented with many options often do not make good decisions, and there is evidence that community colleges could be more successful in helping students persist and complete a program of study if they offered a set of tightly structured program options whose requirements and expected outcomes are clearly defined”

-Jenkins and Cho (2012)



EMILY DEROCCO

*Former US Assistant Sec. of Labor
Former President, The Manufacturing
Institute*

"North Carolina's community college system and leaders clearly lead the way nationally in efficient and effective educational programming, providing pathways directly aligned to skills and jobs in demand across the economy. NC's bold and innovative curriculum approach, coupled with a state funding strategy tiered to prioritize support for educational pathways that reward students with industry-recognized credentials and are most likely to close the skills gap, are models that should be replicated across the nation."¹⁶

Trade Assistance Act Community College Career Training and National Science Foundation Grants

Guilford Tech, \$1.5 Million

NAC National Aviation Consortium
Aviation & Aerospace

Pitt CC, \$20 Million

Health Informatics

Robeson, \$18 Million

Advanced Manufacturing

Forsyth Tech, \$14 Million

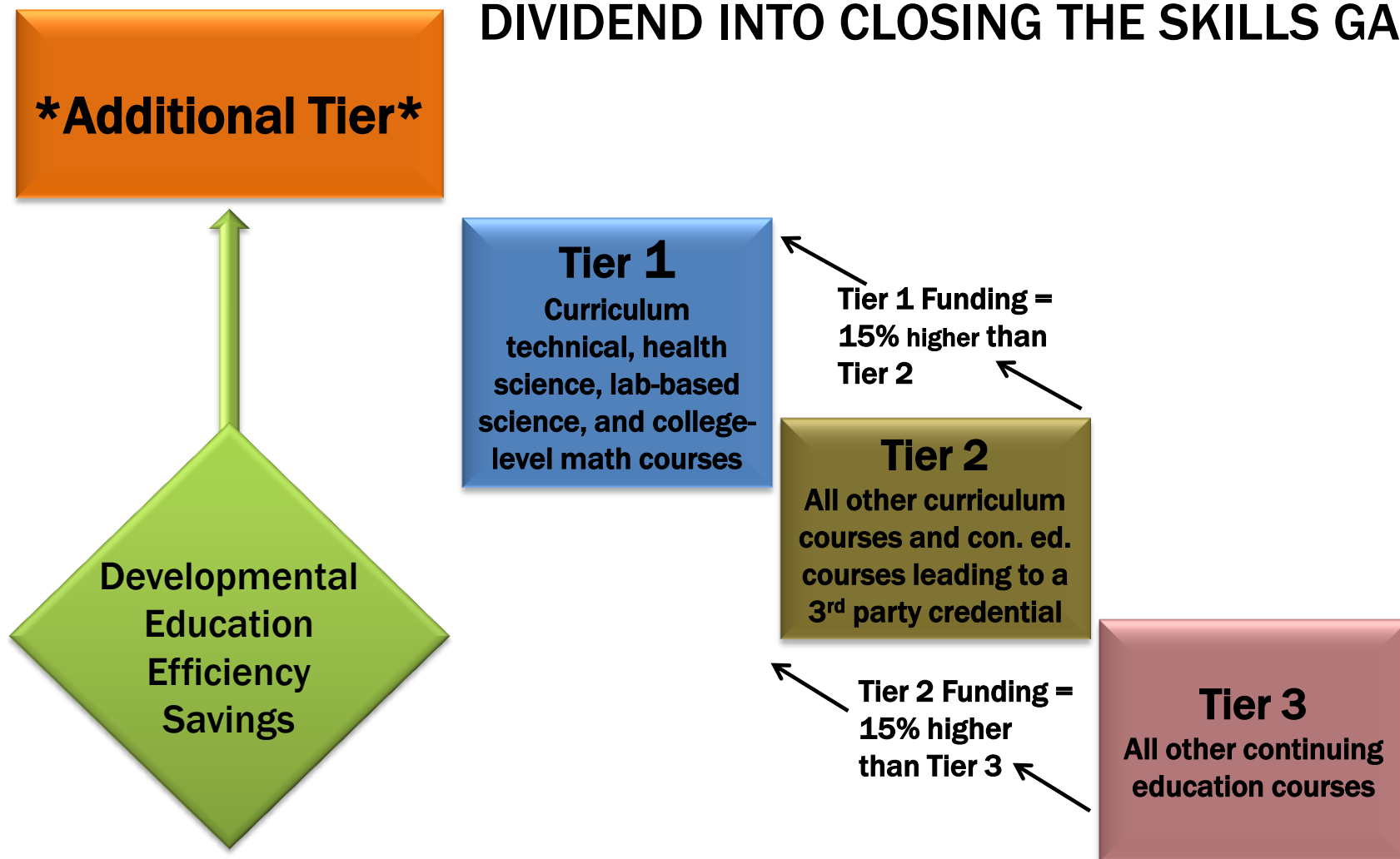
c3bc Community College Consortium
for Bioscience Credentials
#TC-23761-12-60-A-37

Biotechnology

Cleveland CC, \$23 Million

Mission Critical Jobs

POTENTIAL INNOVATION: REINVESTING THE DEVELOPMENTAL DIVIDEND INTO CLOSING THE SKILLS GAP



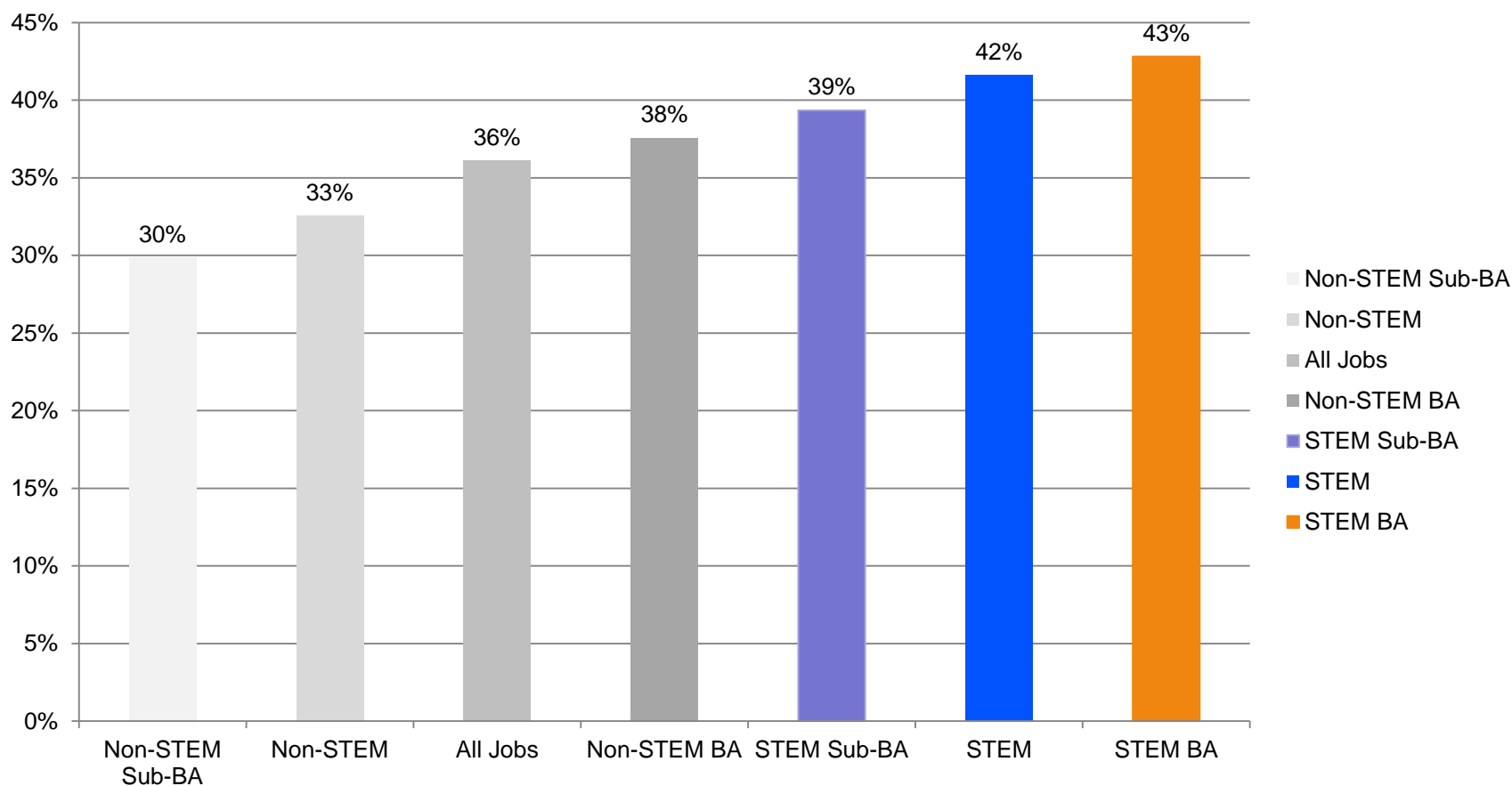
Major Occupational Categories Sorted by STEM Score, with Share of Jobs that are STEM, and Share of U.S. STEM Jobs, 2011

	High-STEM, Share of U.S. Percentage of Jobs	High-STEM Jobs
Architecture and engineering	100%	9%
Life, physical, and social science	87%	4%
Healthcare practitioner and technical	76%	22%
Computer and mathematical science	100%	13%
Installation, maintenance, and repair	53%	10%
Management	27%	6%
Construction and extraction	40%	8%
Education, training, and library	9%	3%
Business and financial operations	42%	10%
Farming, fishing, and forestry	8%	0%
Production	23%	7%
Arts, design, entertainment, sports, and media	16%	1%
...

Source: Brookings analysis of O*NET and OES, 2011.

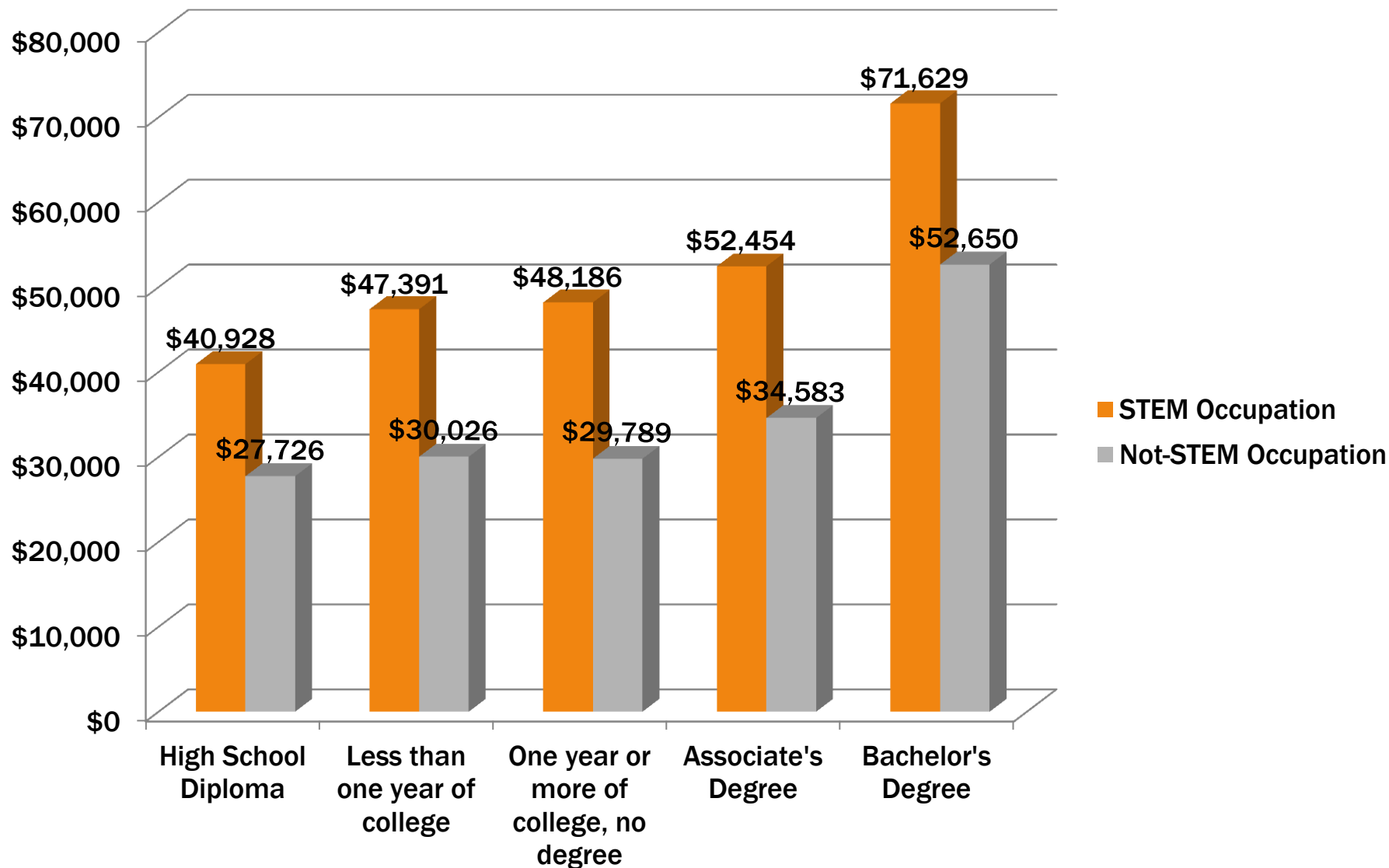
Sub-BA STEM jobs are hard-to-fill

Share of 2011 job openings re-posted after 30 days in 100 largest metropolitan areas



STEM Pays at All Levels of Education

(Analysis of 2012 American Community Survey via IPUMS—excludes non-employed workers)



QUESTIONS/COMMENTS